... NOVEMBER 2010 REGIONAL CLIMATE SUMMARY...

SUMMARY FOR THE SAN FRANCISCO BAY AREA AND MONTEREY BAY AREA...

... RECORD WARMTH FOLLOWED BY RECORD COLD...

THE FIRST HALF OF NOVEMBER WAS WARM...WITH TWO SEPARATE WARM EVENTS RESULTING IN RECORD HIGH TEMPERATURES ACROSS THE REGION. THE SECOND HALF OF THE MONTH WAS COLD. RECORD COOL LOW TEMPERATURES OCCURRED FOR THREE DAYS AROUND THANKSGIVING AND RECORD SNOW FELL ATOP MOUNT HAMILTON. RAIN TOTALS FOR THE MONTH WERE GENERALLY CLOSE TO NORMAL... EXCEPT SOMEWHAT BELOW NORMAL IN THE NORTH BAY.

TEMPERATURES CLIMBED STEADILY DURING THE FIRST FOUR DAYS OF THE MONTH AS A RIDGE OF HIGH PRESSURE BUILT IN ALOFT AND OFFSHORE FLOW DEVELOPED. TEMPERATURES CLIMBED INTO RECORD TERRITORY BY THE 4TH... WHEN 5 DAILY RECORD HIGH TEMPERATURES WERE SET OR TIED. THE SECOND WARM EVENT OCCURRED ABOUT TEN DAYS LATER. SEVERAL HIGH TEMPERATURE RECORDS WERE SET OR TIED ON THE 14TH AND 15TH. IN BETWEEN THESE TWO RECORD WARM EVENTS...TEMPERATURES DROPPED BELOW NORMAL AS A COUPLE OF EARLY SEASON WEATHER SYSTEMS BROUGHT RAIN TO OUR REGION. THE FIRST SYSTEM MOVED IN OFF THE EASTERN PACIFIC AND PRODUCED MODERATE AMOUNTS OF RAIN ON THE 7TH. THE SECOND WAS A COLDER SYSTEM MOVING IN FROM THE NORTH. THAT ONE DROPPED ONLY LIGHT AMOUNTS OF RAIN ON THE 10TH.

TEMPERATURES FELL BELOW NORMAL ON THE 18TH OF NOVEMBER...AND THEN REMAINED THERE FOR THE REST OF THE MONTH. A COLD WEATHER SYSTEM ORIGINATING IN WESTERN ALASKA DROPPED SOUTH ALONG THE WEST COAST... PRODUCING RAIN ACROSS OUR AREA FROM THE 19TH THROUGH THE 21ST AND SNOW ON THE HIGHER MOUNTAIN PEAKS AND RIDGES. THE MOST RAIN FELL ON SATURDAY THE 20TH WHEN A SHARP COLD FRONT MOVED FROM NORTH TO SOUTH THROUGH THE AREA...GENERATING A LINE OF INTENSE SHOWERS AND THUNDERSTORMS. THE LINE OF THUNDERSTORMS DEVELOPED IN THE NORTH BAY DURING THE MIDDLE OF THE AFTERNOON...REACHED SAN FRANCISCO BY LATE AFTERNOON...AND THEN MONTEREY BY EARLY EVENING. THE LIGHTNING DETECTION NETWORK IDENTIFIED OVER 200 CLOUD-TO-GROUND LIGHTNING STRIKES ACROSS THE SAN FRANCISCO AND MONTEREY BAY AREAS AND ADJOINING COASTAL WATERS THAT AFTERNOON AND EVENING. HEAVY DOWNPOURS WITH THESE THUNDERSTORMS RESULTED IN MINOR URBAN FLOODING. A SECOND COLD FRONT BROUGHT ANOTHER ROUND OF LIGHTER PRECIPITATION ON THE 23RD. THE VERY COLD AIRMASS THAT FOLLOWED THESE COLD FRONTS PRODUCED SOME OF THE COLDEST WEATHER ON RECORD FOR SO EARLY IN THE SEASON. RECORD LOW TEMPERATURES OCCURRED ON THREE CONSECUTIVE DAYS...ON THE MORNING OF THE 24TH...25TH (THANKSGIVING) AND 26TH. FOR MOST LOCATIONS...THE COLDEST MORNING WAS THANKSGIVING MORNING WHEN WIDESPREAD FREEZING OR NEAR FREEZING TEMPERATURES OCCURRED.

ONE MORE COLD SYSTEM AFFECTED THE REGION IN NOVEMBER...THIS ONE SWOOPED IN FROM THE NORTHWEST AND BROUGHT A QUICK DOSE OF RAIN TO THE REGION ON THE 27TH. THE AIRMASS WASN'T AS COLD WITH THIS SYSTEM AS THE THANKSGIVING EVENT...YET TEMPERATURES ONCE AGAIN DROPPED TO NEAR FREEZING ON THE MORNING OF THE 29TH.

THE RECORD COLD DURING THE SECOND HALF OF THE MONTH MORE THAN

OFFSET THE RECORD WARMTH DURING THE FIRST HALF. TEMPERATURES FOR THE MONTH AS A WHOLE AVERAGED SLIGHTLY BELOW NORMAL AT MOST LOCATIONS. RAINFALL FOR THE MONTH WAS PRETTY CLOSE TO NORMAL FOR LOCATIONS FROM SAN FRANCISCO SOUTHWARD. HOWEVER...THE NORTH BAY GENERALLY ACCUMULATED ONLY ABOUT TWO THIRDS TO THREE QUARTERS OF THEIR NORMAL NOVEMBER RAINFALL.

THE LICK OBSERVATORY...LOCATED NEAR THE 4200 FOOT SUMMIT OF MOUNT HAMILTON EAST OF SAN JOSE...HAS BEEN RECORDING WEATHER OBSERVATIONS FOR ABOUT 60 YEARS. PRIOR TO NOVEMBER 2010...THE MOST SNOWFALL RECORDED AT LICK OBSERVATORY DURING THE MONTH OF NOVEMBER WAS 3 INCHES IN 1955. DURING NOVEMBER 2010...9 INCHES OF SNOW FELL AT LICK OBSERVATORY. MOST OF THOSE NINE INCHES OCCURRED ON THE 20TH AND 21ST.

...NOVEMBER REGIONAL TEMPERATURE SUMMARY...

				NORMAL LOW	DEPARTURE FROM NORMAL
62.2 64.2 63.8 62.8	63.3 65.1 65.0 64.1	-1.1 -0.9 -1.2 -1.3	45.2 42.7 41.6 44.9	44.5 42.9 41.7 45.7	-1.3 0.7 -0.2 -0.1 -0.8 -1.0
SAN FRANCISCO PENINSULA					
59.7 65.0 62.4	61.3 64.8 62.5	-1.6 0.2 -0.1	48.4 42.9 47.6	48.9 43.7 47.5	-0.5 -0.8 0.1
64.9 63.4 63.7 58.1 64.4	65.1 65.1 63.9 61.7 64.1	-0.2 -1.7 -0.2 -3.6 0.3	45.0 42.4 M 44.0 45.7	47.1 41.8 43.6 43.6 47.1	-2.1 0.6 M 0.4 -1.4
	63.6 62.2 64.2 63.8 62.8 65.9 NSULA. 61.6 59.7 65.0 62.4 62.4 63.7 58.1 64.4	63.6 65.3 62.2 63.3 64.2 65.1 63.8 65.0 62.8 64.1 65.9 65.1 NSULA 61.6 62.4 59.7 61.3 65.0 64.8 62.4 62.5 62.4 63.6 65.1 65.8 64.9 65.1 63.7 63.9 58.1 61.7 64.4 64.1	AVG NORMAL FROM HIGH HIGH NORMAL 63.6 65.3 -1.7 62.2 63.3 -1.1 64.2 65.1 -0.9 63.8 65.0 -1.2 62.8 64.1 -1.3 65.9 65.1 0.8 NSULA 61.6 62.4 -0.8 59.7 61.3 -1.6 65.0 64.8 0.2 62.4 62.5 -0.1 62.4 63.6 -1.2 65.1 65.8 -0.7 64.9 65.1 -0.2 63.4 65.1 -1.7 63.7 63.9 -0.2 58.1 61.7 -3.6	AVG NORMAL FROM HIGH HIGH NORMAL LOW 63.6 65.3 -1.7 41.9 62.2 63.3 -1.1 45.2 64.2 65.1 -0.9 42.7 63.8 65.0 -1.2 41.6 62.8 64.1 -1.3 44.9 65.9 65.1 0.8 41.6 NSULA 61.6 62.4 -0.8 43.0 59.7 61.3 -1.6 48.4 65.0 64.8 0.2 42.9 62.4 62.5 -0.1 47.6 62.4 63.6 -1.2 49.8 65.1 65.8 -0.7 44.9 64.9 65.1 -0.2 45.0 63.4 65.1 -1.7 42.4 63.7 63.9 -0.2 M 58.1 61.7 -3.6 44.0 64.4 64.1 0.3 45.7	AVG NORMAL FROM AVG NORMAL LIGH HIGH HIGH NORMAL LOW LOW 63.6 65.3 -1.7 41.9 43.2 44.5 44.5 44.5 44.5 44.5 44.5 44.5 44

SOUTH BAY AND SANTA CRUZ COUNTY...

BEN LOMOND MOUNT HAMILTON SAN JOSE SANTA CRUZ WATSONVILLE	67.1 50.9 65.6 64.0 65.1	67.1 54.0 64.4 65.0 65.8	0.0 -3.1 1.2 -1.0 -0.7	38.6 40.5 45.1 42.2 42.0	39.5 41.1 45.6 43.1 42.5	-0.9 -0.6 -0.5 -0.9
MONTEREY AND SAN	BENITO	COUNTI	ES			
CARMEL VALLEY HOLLISTER KING CITY MONTEREY	66.1 64.0 67.5 62.2	68.5 67.2 68.6 64.6	-2.4 -3.2 -1.1 -2.4	40.9 40.0 39.3 46.3	42.7 41.6 38.7 47.0	-1.8 -1.6 0.6 -0.7

...NOVEMBER REGIONAL PRECIPITATION SUMMARY...

LOCATION	NOV TOTAL	AVERAGE NOV PRECIP	PERCENT OF NORMAL
NORTH BAY			
CLOVERDALE FORT ROSS HEALDSBURG KENTFIELD MUIR WOODS NAPA OCCIDENTAL PETALUMA SAINT HELENA SAN RAFAEL	M 3.86 4.87 M 3.05 5.49 2.53 M 3.77 3.13	6.07 5.35 6.04 7.61 6.02	84 69 M 64 64 M 82 67 70 M 86 73
SAN FRANCISCO PENI	NSULA		
PALO ALTO REDWOOD CITY SAN FRANCISCO AIRPORT SAN FRANCISCO	2.96 1.94 2.50 2.41	2.62	81 110 95
DOWNTOWN EAST BAY	3.10	3.20	97
BERKELEY CONCORD FREMONT LIVERMORE		3.72 2.00 1.69 1.75	80 100 121 115

MARTINEZ MOUNT DIABLO	2.21	2.59	85
	3.17	3.41	93
NEWARK	1.69	1.84	92
OAKLAND		3.24	105
RICHMOND	J.41 M	3.47	103 M
RICHMOND	ΙVI	3.4/	IvI
SOUTH BAY AND SAN	NTA CRUZ (COUNTY	
BEN LOMOND	5.70	6.34	90
	2.30	2.53	91
LOS GATOS	М	2.47	М
MOUNT HAMILTON	4.87	3.21	152
SAN JOSE			102
SANTA CRUZ		4.08	99
WATSONVILLE		3.00	108
MONTEREY AND SAN	BENITO CO	DUNTIES	
BIG SUR STATION	3.81	5.37	71
CARMEL VALLEY		2.06	117
HOLLISTER	2.11	1.87	113
	1.32	1.27	104
MONTEREY		2.43	89
PINNACLES NATION			
MONUMENT	2.16	1.72	126
SALINAS	M	1.85	M

...DAILY TEMPERATURE RECORDS FOR NOVEMBER 2010...

		RECORD MAXIMUM	DDEMIONS
DATE	LOCATION	TEMP	PREVIOUS RECORD
11/04	MOFFETT FIELD	82	82 IN 1980
11/04	SANTA ROSA	81	79 IN 1951
11/04	RICHMOND	81	81 IN 1976
11/04	SAN JOSE	85	84 IN 1949
11/04	GILROY	85	85 IN 1976
11/14	MOFFETT FIELD	80	78 IN 2008
11/14	KENTFIELD	81	80 IN 1923
11/15	KENTFIELD	84	77 IN 1938
11/15	SAN RAFAEL	82	75 IN 2008

11/15	SAN FRANCISCO DOWNTOWN	80	80 IN 2008
11/15	MOFFETT FIELD	81	81 IN 2008
11/15	NAPA	83	83 IN 2008
11/15	SANTA ROSA	84	84 IN 2005
DATE	LOCATION	RECORD MINIMUM TEMP	PREVIOUS RECORD
11/24	SAN FRANCISCO DOWNTOWN	41	41 IN 1906
11/24	OAKLAND MUSEUM	40	41 IN 2007
11/24	OAKLAND AIRPORT	34	34 IN 1952
11/24	MONTEREY	34	37 IN 1993
11/24	SALINAS	30	32 IN 2006
11/25	OAKLAND MUSEUM	36	42 IN 2003
11/25	OAKLAND AIRPORT	32	36 IN 1956
11/25	SALINAS	29	34 IN 1980
11/25	SAN FRANCISCO DOWNTOWN	42	42 IN 1892
11/25	GILROY	28	28 IN 1993
11/25	NAPA	28	28 IN 1993
11/26	OAKLAND MUSEUM	39	40 IN 1973
11/26	MOFFETT FIELD	32	34 IN 1947
11/26	SALINAS	29	34 IN 1966
11/26	OAKLAND AIRPORT	35	35 IN 1952
11/29	OAKLAND AIRPORT	32	34 IN 2004

...MONTHLY RANKS FOR DOWNTOWN SAN FRANCISCO...

AVERAGE HIGH TEMPERATURE....62.4....57TH COOLEST OUT OF 136 YEARS AVERAGE LOW TEMPERATURE....49.8....33RD COOLEST OUT OF 136 YEARS PRECIPITATION......3.10 INCHES....53RD WETTEST OUT OF 161 YEARS

NOTE: THIS CLIMATOLOGICAL DATA IS PRELIMINARY. FOR OFFICIAL CERTIFIED CLIMATOLOGICAL DATA PLEASE CONTACT THE NATIONAL CLIMATIC DATA CENTER AT 828-271-4800 OR http://www.ncdc.noaa.gov.OFFICIAL VALUES AS DETERMINED AT THE ABOVE WEB SITE MAY TAKE SEVERAL MONTHS FOR AUTHENTICATION AND PUBLICATION.

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